

## YEAR 9 INFORMATION TECHNOLOGY WORK PLAN: Semester 2, 2017 – Ricky Sinclair



UNIT	TERM 3 TOPICS	ASSESSMENT	DUE DATE
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	<p><b>Programming - Python</b></p> <p><i>Students will learn the fundamentals of programming using Python</i></p> <p><b>Analyse and visualise</b> data to create information and address complex problems; and model processes, entities and their relationships using structured data</p> <p>Precisely <b>define and decompose</b> real-world problems, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs</p> <p><b>Design</b> algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases</p> <p><b>Implement</b> modular programs, applying selected algorithms and data structures including using an object-oriented programming language</p>	<p>Design, develop and evaluate a <i>Python Program</i> based upon client needs. Undertake an exam to test knowledge and understanding.</p>	<p><b>Week 9</b></p> <p><b>9ITA</b> Exam: Wednesday 6<sup>th</sup> of September</p> <p><b>9ITB</b> Exam: Friday 8<sup>th</sup> of September</p>
	<p><b>Electronic Programming - Microcontrollers</b></p> <p><i>Students will learn the fundamentals of electronics and microcontrollers</i></p> <p><b>Analyse and visualise</b> data to create information and address complex problems; and model processes, entities and their relationships using structured data</p> <p>Precisely <b>define and decompose</b> real-world problems, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs</p> <p><b>Design</b> algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases</p> <p><b>Implement</b> modular programs, applying selected algorithms and data structures including using an object-oriented programming language</p>	<p>Use Microcontrollers to design, develop and evaluate solve series of real world problems</p>	<p><b>Week 5:</b> Hand out</p> <p><b>Week 7:</b> Monitor</p> <p><b>Week 8:</b> Tasks due</p> <p><b>9ITA</b> Friday 24<sup>th</sup> November</p> <p><b>9ITB</b> Thursday 23<sup>rd</sup> November</p>

This work plan was last updated on Monday, 17 July 2017. The contents are subject to change – students will be advised in advance of any changes - regularly check for updates.